



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,143	10/20/2003	Cyrille de Brebisson	100204485-1	2787

22879 7590 07/18/2006

HEWLETT PACKARD COMPANY
P O BOX 272400, 3404 E. HARMONY ROAD
INTELLECTUAL PROPERTY ADMINISTRATION
FORT COLLINS, CO 80527-2400

EXAMINER

NAMAZI, MEHDI

ART UNIT PAPER NUMBER

2189

DATE MAILED: 07/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/689,143	DE BREBISSEON ET AL.	
	Examiner	Art Unit	
	Mehdi Namazi	2189	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3,5-14,20-24 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) 3,20-23 and 26 is/are allowed.
- 6) ☒ Claim(s) 1, 5-14, and 24 is/are rejected.
- 7) ☐ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This office action is in response to amendment filed on April 24, 2006.

Response to Arguments

Applicant's arguments with respect to claims 1, 2, 5, 14, 20-24, and 26 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 10-14 are rejected under 35 U.S.C. 101 because claim 10 only claims a host and storage device (with particular data values stored therein). The particular value attributed to data stored on a device (without any useful, concrete, and tangible result) does not define for patentability purpose and is also non-functional descriptive material (it is just data with no function set forth).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2189

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5, 6, 8-11, 13, 14, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by billings et al. (US. Patent No. 6,223,303).

With regard to claims 1, 5, and 24, Billing teaches storing defective data site information for a storage device (Fig. 6, Defect management table; fig. 7, section 166), the method comprising:

determining a first defective data site associated with the storage device (fig. 7, 166, fig. 3, shows the first defective data site D1), determining a second defective data site associated with the storage device (fig. 7, 166, and fig. 3 shows the second defective data site D2), determining a spacing value that represents spacing between the first defective data site and the second defective data site; and storing the spacing value in or on the storage device (fig. 3 shows the boundary of tier 1 (140) which is consist of first defective data site and tier 2 (142) which is also consist of second defective data site, and relative distance between these two tiers is the distance between two defective data sites, and the spacing is on the disk).

With regard to claim 10, Billings teaches an electronic system, comprising
a host (fig. 1, element 36)
a storage device operably couplable to the host and having data sites for storing data (fig. 1, element 34) the data sites comprising defective data sites (fig. 2);

Wherein the storage device maintains defect information (fig. 2), the defect information comprising a spacing value the represents spacing between defective data sites of the storage device (fig. 3, and 4).

With regard to claim 6, Billings teaches the differences in location between defective data sites are differences in sector numbers (since the memory is divided into plurality of sectors and if each defect is located on different sector, therefore the distance between two sector is the space value of those two defects).

With regard to claims 8, 13, Billings teaches the storage device comprises a hard drive (fig. 1).

With regard to claim 9, Billings teaches in combination with a testing controller operably connectable to the storage device for discovering the defective data sites (figs. 1, and 7).

With regard to claim 11, Billings teaches the first defective data site has a first data site number and the second defective data site has a second data site number (fig. 4), further wherein determining a spacing value comprises determining a difference between the first data site number and the second data site number (fig. 3).

With regard to claim 14, the storage device maintains the defect information and is adapted to report the defect information to the host (fig. 8, 186).

Claims 7, and 12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Billings et al. (US. Patent No. 6,223,303), in view of Hidaka (US. Publication No. 2004/0184315).

With regard to claims 7, and 12, Billings teaches the claimed invention but fails to teach the storage device is a magnetic random access memory (MRAM).

Hidaka teaches a memory device made of thin film magnetic (paragraph 5).

It would have been obvious to one of ordinary skill in the art to modify the work of Billings because Hidaka teaches magnetic random access memory device capable of non-volatile data storage with low power consumption (paragraph 4).

Allowable Subject Matter

Claims 3, 20-23, and 26 are allowed.

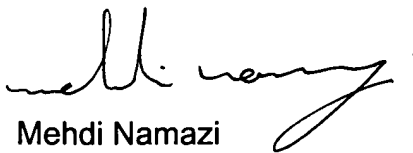
Claim 2 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2189

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mehdi Namazi whose telephone number is 571-272-4209. The examiner can normally be reached on Monday-Friday 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Reginald Bragdon can be reached on 571-272-4204. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Mehdi Namazi
July 10, 2006



REGINALD BRAGDON
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100